CENTER FOR

RAPID PROTOTYPING

UNIVERSITY OF UTAH

CENTER

The Center for Rapid Prototyping is focused in the areas of ultrasonic sensing of injection molding, and physical and virtual geometric modeling for computer aided design.

TECHNOLOGY

This Center is focusing on several projects which include machining techniques to include a method for making Powder metal parts, a low cost software allowing the production of prototype parts on a 2 or 3 axis computer controlled router or mill, and machining of molds for micro-injection molding. Examples of products include:

*A series of new sensors and control techniques for improved polymer processing

*A new Personal Prototyping System (PPS) that makes rapid prototyping available to small companies and perhaps the private consumer.

*A low cost 3D scanning system that, used in conjunction with the PPS becomes a 3D fax machine.

*A device that is capable of building very large prototypes (Shapemaker).

*A photopolymer based technique to create prototypes in a single step (Inverse Tomographic Construction or ITC).

Can you imagine…..

A personal prototyping system that develops and creates prototypes at a very low cost on your own inkjet or laserjet printer???

ACCOMPLISHMENTS

In the first year of funding, several milestones were met including the completed commercial RapidPro software, proof of principle demonstration of the Personal Prototyping System, a demonstration of the Ultrasound sensor to a local company, and a completed calibration demonstration for the 3D scanner.

Contact Information

Director: Charles Thomas
University of Utah
50 S Central Campus Drive
Salt Lake City, UT 84112
801-585-6939
cthomas@mech.utah.edu